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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,264	03/29/2004	Hasler Hayes	120-344	2767
76661	7590	02/21/2008	EXAMINER	
DAVID A. DAGG, ESQ. 44 CHAPIN ROAD NEWTON, MA 02459			ARAGON, LORENZO C	
ART UNIT	PAPER NUMBER			
	4157			
NOTIFICATION DATE	DELIVERY MODE			
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DAVE@DAVEDAGG.COM

Office Action Summary	Application No.	Applicant(s)
	10/812,264	HAYES ET AL.
	Examiner LORENZO C. ARAGON	Art Unit 4157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03/29/2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-11 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 29 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1668)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - a. On page 7, line 12, "7" should be **9**.
 - b. On page 11, line 12, "66" should be **68**.
 - c. Appropriate corrections are required.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign mentioned in the description:
 - a. Reference **"22"** in FIG. 1 (initially referenced on page 7, line 3 of the Specification) does not exist;
 - b. Reference character **"13"** in FIG. 1 has been used to designate both TRANSMIT LOGIC and RECEIVE LOGIC;
 - c. Specification fails to reference **"68"** and **"72"** of FIG. 2.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 1, line 12, "said video data" is indefinite because of improper antecedent basis. Taken in context of the claim as written, the variable bit rate (VBR) data, "said video data," would in some undefined manner be sent to the video destination in a constant bit rate stream. "Said video data" refers to the VBR data received at the video source. The use of "said data" from this point forward in the claims requires careful review and correction, as needed. The reference to "said data" in this element, and in subsequent uses, refers to the original video data received at the source. As presently used in the claims, "said data" could have three interpretations: 1) transcoded VBR data, also known as constant bit rate (CBR) data, between video source and video destination, 2) initially received VBR data at the source and received at the video destination and delayed prior to display, and 3) initially received VBR data at the source and received at the video destination and transcoded prior to delay.

For purposes of art rejection and because interpretations 2) and 3) above do not make any sense, "said data" is defined as listed above in 1), transcoded VBR data

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or CBR data. The use of "said" in all claims also requires careful review and correction, as needed.

b. Claim 1, line 13, "delaying display of said video data" is indefinite. Should it be "transcoded VBR data or CBR data?"

For purposes of art rejection, it is read as such. If the above is correct, this conflicts with the applicant's claim of displaying VBR data. "Said video data" refers to the VBR data received at the video source.

c. Claim 1, line 14, "transcoding said video data" is indefinite. Should it be "transcoding VBR data or CBR data?"

For purposes of art rejection, it is read as such. "Said video data" refers to the VBR data received at the video source.

d. Claim 1, line 18, "storing excess received video data in at least one buffer within said video destination" is indefinite. Please clarify which video data is stored.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1, 3-4, 6, 8-9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costa, U.S. Patent Publication 2004/0143849 in view of Urdang et al., U.S. Patent Publication 2007/0089147.**

(claim 6 is most representative and will be analyzed and rejected first)

a. Regarding Claim 6, Costa discloses a system for providing video data (fig. 7, abstract), comprising:

video source equipment operable to receive video data in a variable bit rate data stream (212 serves this purpose) and to transcode said video data into a constant bit rate data stream (220 serves this purpose) "between" said video source equipment (212) and video destination equipment (230, 232; It should be noted that transcoding 220 is "between" 212 and 230,232, see fig. 9) wherein said constant bit rate data stream has a data rate exceeding a minimum display rate (paragraph [0044], in Costa, the link rate 1.5 Mbps would be the presumptive minimum display rate, and CBR can be higher at 2 Mbps as disclosed); and

wherein said video destination equipment (230,232) is operable to receive said video data in said constant bit rate stream (reception at 230, 232 is of CBR bit streams, see FIG. 9), to transcode said video data into a variable bit rate stream for variable bit rate display processing to generate a display at said video destination (page 6, paragraph [0071], lines 3-7), said variable bit rate display processing varying between said minimum display rate and a maximum display rate (see paragraph [0081], Costa discloses here that VBR bit rates can vary between a range of 1.5 Mbps to 12 Mbps depending on the types of definition video for display); and to store excess received video data in at least one buffer within said video destination (page 3, paragraph [0036], lines 1-2).

Costa does not explicitly disclose a delay of the transcoded data at the video destination. However, Urdang discloses introducing a delay into the transmission of the broadcast program (Urdang, page 1, paragraph [0006], lines 1-5).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to incorporate a delay to the video data. The delay would support varying display rates and enable the manipulation of the data for purposes such as fast forwarding).

b. Regarding Claim 8, Costa does not teach video destination equipment that is further operable to receive at least one retransmitted video data message at said video destination, to determine a location in said at least one buffer where a corresponding previous video data message belonged, and to write said at least one retransmitted video data message into said at least one buffer at said determined location. However, Urdang discloses a method for sending a message back to the data source and receiving the program material in the same program stream (Urdang, page 6, paragraph [0061], lines 1-16). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine the teachings of Urdang with Costa to enable the system to receive retransmitted video data messages and send them to the proper location. The ability to accommodate retransmitted video data messages would enable the system to provide better quality display by addressing missing or damaged video data.

c. Regarding Claim 9, Costa does not teach video destination equipment that is further operable to receive a fast forward user command at said video destination, and

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to increase said display rate responsive to said received fast forward user command. However, Urdang discloses a system with real-time trick capabilities (page 4, paragraph [0043], lines 1-7). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine the teachings of Urdang with Costa to provide fast forward and other "trick" capabilities. Greater navigation through the video data is a desired feature by the end user.

- d. In regards to Claims 1 and 11, they have been analyzed and rejected for the same reasons set forth in the rejection of Claim 6 above because the scope of the claims are similar.
- e. In regards to Claim 3, it has been analyzed and rejected for the same reasons set forth in the rejection of Claim 8 above because the scope of the claims are similar.
- f. In regards to Claim 4, it has been analyzed and rejected for the same reasons set forth in the rejection of Claim 9 above because the scope of the claims are similar.

10. Claims 2, 5, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costa.

- a. Regarding Claim 7, Costa does not explicitly disclose a system wherein video destination equipment is further operable to determine said delay period is determined responsive to whether said video data represents a live event as claimed. However, such consideration is contemplated because Costa does provide a method to manage "real-time" data at the receiver (page 4, paragraph [0047], lines 1-14 and FIG.2). One skilled in the art would have recognized that a "nominal" delay must exists in Costa, and that the receiver must take that into account to simulate "real-time" display.

- b. Regarding Claim 10, Costa discloses a system wherein video destination includes a personal video recorder device, wherein said personal video recorder includes a hard disc storage component, and wherein said at least one buffer is defined within said hard disc storage component (page 6, paragraph [0072], lines 1-7. Although Costa does not disclose the exact terms of this claim, he does list as an example a general purpose personal computer and it is well known that this device meets or exceeds the limitations of this claim).
- c. Regarding Claim 2, it has been analyzed and rejected for the same reasons set forth in the rejection of Claim 7 above because the scope of the claims are similar.
- d. Regarding Claim 5, it has been analyzed and rejected for the same reasons set forth in the rejection of Claim 10 above because the scope of the claims are similar.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. U.S. Patent No. 7,075,990 to Costa discloses methods and systems to improve, and optionally optimize, the video quality of live content on bandwidth-limited transmission links.
- b. U.S. Patent Application Publication No. 2006/0179462, Williams et al., discloses a method of receiving variable rate data.
- c. U.S. Patent Application Publication No. 2003/0163825, Choi, discloses an invention to provide a speed change playback apparatus of a digital television.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LORENZO C. ARAGON whose telephone number is (571)270-3727. The examiner can normally be reached on 8:00 AM - 10:00 PM M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorenzo C. Aragon/
Examiner, Art Unit 4157

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